

REMARKS

Favorable reconsideration of the application is respectfully requested in light of the amendments and remarks herein.

Upon entry of this amendment, claims 1, 2, 4-6, 8, 9, and 11-13 will be pending. By this amendment, claims 1 and 8 have been amended. No new matter has been added.

Amendment to the Specification

In Section 2 of the Final Office Action dated January 8, 2007 (hereinafter referred to as “Office Action”), the abstract of the disclosure stands objected to because of “[0023]” at the beginning of the paragraph. The abstract has been amended to address this objection.

Accordingly, it is submitted that the objection to the abstract has been overcome and withdrawal thereof is respectfully requested.

§103 Rejection of Claims 1-2 and 8-9

In Section 3 of the Office Action, claims 1-2 and 8-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Salmonsens (U.S. Pub. No. 2003/0225568) in view of Blood et al. (U.S. Patent. No. 6,874,060; hereinafter referred to as “Blood”).

In the Background section of the Specification, a need is stated by the inventor for “support for large magnetic removable devices by treating the removable magnetic media as if it were a removable optical device. ...[a]n optical interface puts removable magnetic media on par to compete with the Optical drive industry such as CD/DVD type devices, rather than being compared to the hard drive industry.” *Specification, paragraph 0004.*

To address the problem stated above, embodiments of the present invention provide methods and systems of interfacing a removable magnetic media system “utilizing the command set normally associated with CD/DVD type devices ... [which] are documented in the MMC specification,” and an “optical [drive] file system.” See *Specification, paragraphs 0005, 0018*.

For example, method claim 1, as presented herein, includes:

configuring a removable magnetic media system to use an optical drive interface to communicate with the operating system;

using an optical drive file system to enable communication between the removable magnetic media system and the operating system;

performing read and write operations to the removable magnetic media system using MMC commands used by the optical drive file system; and

storing data on the removable magnetic media system in compliance with the optical drive file system.

Accordingly, one aspect of claim 1 includes at least performing read and write operations to a removable magnetic media system using MMC commands used by an optical drive file system, wherein data are stored on the removable magnetic media system in compliance with the optical drive system. That is, reads and writes to an information storage device are performed using CD/DVD type commands (MMC) which are used by the optical drive file system (see *Specification, paragraph 21*), where the information storage device is a removable magnetic media system that is configured to store data according to the format of an optical drive file system. See *Specification, paragraph 0018*. Moreover, “[u]sing an optical file system such as UDF provides many advantages to the removable magnetic drive, such as ... Large capacity [wherein a] UDF-compliant file system will be able to store more data ... and a larger number of

files than current operating systems. This expanded storage space allotment enables UDF to be usable by all current operating systems.” *Specification, paragraphs 0018–19*. For example, “[s]mall files written to a UDF disk [do] not take up extra space. [That is, a] 512 byte file on a 2 GB Macintosh HFS volume takes up 32 KB of space. The same file on an optical disk formatted with UDF would only take up 512 bytes.” *Specification, paragraph 0020* (emphasis added). A removable magnetic media formatted according to UDF (i.e., an optical drive file system) thus affords advantages including at least a larger number of files, usability by a variety of operating systems, and efficiency in terms of file size. Accordingly, claim 1 includes storing data on a removable magnetic media system in compliance with an optical drive file system.

By contrast, Salmonsens discloses an emulator that can “receive signals from an external source such as Ethernet from PC and convert the signals so that [an] MPEG decoder functions as if receiving signals from a standard supply device such as CD or DVD” *Salmonsens, paragraph 31* (emphasis added). Thus, Salmonsens converts signals in a first format compatible with transmission from a PC into signals in a second format consistent with signals that might be received from a CD or DVD device. However, Salmonsens fails to teach or suggest using MMC commands to perform read and write operations with a removable magnetic media system using an optical drive file system, wherein data are stored on the removable magnetic media system in compliance with the optical drive system. Thus, Salmonsens fails to teach or suggest all of the limitations of claim 1 as amended herein.

As to Blood, the Office Action states, “Blood teaches an interface system and method comprising a virtual disk subsystem (Fig. 1-3, ref.12) configured to provide communication between a storage drive (Fig. 3, ref. 82) and a host (Fig. 1-2, ref. 10)(col. 3, l. 25 to col. 4, l. 19); and utilizing disk commands including Multi-Media Commands (MMC) for accessing the

storage drive (col. 3, ll. 40-41).” *Office Action*, page 3, lines 17-21.

Blood discloses a virtual disk subsystem 12 including an ATA bridge 76 that receives disk commands from an ATA controller 20 and passes them to a disk emulator 78. The disk emulator 78 communicates over a network with a workstation 80 having a virtual disk server 81 and a local drive 82. Disk commands from the ATA controller 20 may be used to access the local drive 82 using the other aforementioned components. While the disk commands may include commands from many types of command sets, they are interpreted by the virtual disk subsystem 12 and virtual disk server 81 and apparently converted into whatever form is required by the local drive 82, “fooling” the ATA controller 20 into operating as if a local disk drive were connected to ATA controller 20. *See Blood*, Col. 3, line 25 to Col. 4, line 5. However, there is no indication the disk commands from the ATA controller 20 are compliant with the file system and data format used by the local drive 82 of the workstation 80. Thus, even assuming that Blood discloses the use of MMC commands given by an ATA controller 20, which Applicants do not acquiesce to, Blood fails to teach or suggest storing data on a removable magnetic media system in compliance with an optical drive file system. Therefore, Salmonsens and Blood, individually or in combination, fail to teach or suggest all the limitations of claim 1.

Based on the foregoing discussion, claim 1 should be allowable over Salmonsens and Blood and such allowance is respectfully requested. Further, since independent claim 8 parallels claim 1 and recites similar limitations as recited therein, claim 8 should also be allowable over Salmonsens and Blood. Furthermore, since claims 2 and 9 depend from claims 1 and 8, respectively, claims 2 and 9 should also be allowable over Salmonsens and Blood.

Accordingly, it is submitted that the rejection of claims 1-2 and 8-9 based upon 35 U.S.C. §103(a) has been overcome by the present remarks and withdrawal thereof is respectfully

requested.

§103 Rejection of Claims 4, 6, 11 and 13

In Section 6 of the Office Action, claims 4, 6, 11 and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Salmonsens and Blood in further view of the “Universal Disk Format Specification” (referred to hereinafter as “UDF Specification”).

Based on the foregoing discussion regarding independent claims 1 and 8, and since claims 4, 6, 11, and 13 depend from one of claims 1 and 8, claims 4, 6, 11, and 13 should also be allowable over Salmonsens and Blood. The Office Action states that the UDF Specification “teaches a standard comprising: writing packets of 64KB with 2K sectors ... and supporting multi-volume” *Office Action, page 5, lines 9–12*. Even assuming that the UDF Specification discloses writing packets of 64KB with 2K sectors and supporting multi-volume, which Applicants do not acquiesce to, the UDF Specification fails to teach or suggest using MMC commands to perform read and write operations with a removable magnetic media system using an optical drive file system, and storing data on the removable magnetic media system in compliance with the optical drive file system. Therefore, since claims 4, 6, 11, and 13 should be allowable over Salmonsens and Blood as discussed above, Salmonsens, Blood, and the UDF Specification, individually or in combination, fail to teach or suggest all the limitations of claims 4, 6, 11, and 13.

Accordingly, it is submitted that the rejection of claims 4, 6, 11 and 13 based upon 35 U.S.C. §103(a) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

§103 Rejection of Claims 5 and 12

In Section 7 of the Office Action, claims 5 and 12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Salmonsens and Blood in view of Zou et al. (U.S. Patent No. 7,058,284; hereinafter referred to as “Zou”).

Based on the foregoing discussion regarding independent claims 1 and 8, and since claims 5 and 12 depend from one of claims 1 and 8, claims 5 and 12 should also be allowable over Salmonsens and Blood. As to Zou, the Office Action states, “Zou teaches a system and a method comprising the automatic running of an optical disk when the disk is inserted into the disk drive (col. 1, ll. 57–60).” *Office Action, page 5, lines 11–12*. Even assuming that Zou discloses automatically running an optical disk, which Applicants do not acquiesce to, Zou yet fails to teach or suggest using MMC commands to perform read and write operations with a removable magnetic media system using an optical drive file system, and storing data on the removable magnetic media system in compliance with the optical drive file system. Therefore, since claims 5 and 12 should be allowable over Salmonsens and Blood as discussed above, Salmonsens, Blood, and Zou, individually or in combination, fail to teach or suggest all the limitations of claims 5 and 12.

Accordingly, it is submitted that the rejection of claims 5 and 12 based upon 35 U.S.C. §103(a) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

Conclusion

In view of the foregoing, applicants respectfully request reconsideration of claims 1, 2, 4–6, 8, 9, and 11–13 in view of the amendments and remarks herein and submit that all pending claims are presently in condition for allowance.

In the event that additional cooperation in this case may be helpful to complete its prosecution, the Examiner is cordially invited to contact Applicants' representative at the telephone number written below.

The Commissioner is hereby authorized to charge any insufficient fees or credit any overpayment associated with the above-identified application to Deposit Account **50-2075**.

Respectfully submitted,
Procopio, Cory, Hargreaves & Savitch

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By: /Stephen C. Beuerle/
Stephen C. Beuerle,
Reg. No. 38,380

Procopio, Cory, Hargreaves & Savitch LLP
530 B Street, Suite 2100
San Diego, California 92101-4469
(619) 238-1900
Customer No. **27189**